What is a SPECT Brain Scan?

SPECT (Single Photon Emission Computed Tomography) is a diagnostic nuclear medicine imaging procedure that permits physicians to visualize brain function by obtaining multiple detailed perfusion images of the brain.

How Should I prepare for it?

- **What Can I Expect During the Test?**

  A SPECT Brain scan can show how well the various regions of your brain are functioning. This information can help your doctor make a more accurate diagnosis. It can also be used to gauge success of therapy.

  Growing evidence suggest SPECT scans can help guide your doctor in prescribing medications by:

  1. Differentiating trauma to your brain from a personality disorder, psychoses, or other problem.
  2. Differentiating unrecognized TBI (Traumatic Brain Injury).
  3. Differentiating depression from dementia.
  4. Differentiating ADHD from bipolar spectrum.

If I Have had a prior CT or MRI Brain Scan, do I still need to have a Brain SPECT scan?

To fully evaluate a patient’s symptoms, information on both the brain’s structure (anatomy) and its blood supply is often necessary. CT and MRI provide detailed information on the structure of the brain. However, in many patients the symptoms cannot be completely explained by anatomic changes, or these scans may appear normal. SPECT can often give your physician important information on blood flow that would not be available through these other diagnostic techniques such as in mild Traumatic Brain Injuries.

Examples of TBI include a car accident, sports injury, a fall, any head trauma, or exposure to military duty.

The best diagnosis for some patients is made only after evaluating the blood flow to various areas of the brain and comparing these to normal patterns. The changes which may be detected on Brain SPECT studies are diagnostic of some diseases.

When doctors combine information on your brain’s anatomy and function, they have a more complete understanding of what may be causing your symptoms.

What Can I Expect during a Brain SPECT scan?

The day of the exam you will sit down with the technologist who will explain the entire process as well as obtaining your medical history, current medications, and other diagnostic tests.

A radiopharmaceutical called 99mTc- Ceretec will then be injected into a vein in your hand or arm while you are in a dimly lit room and comfortable position. This non-contrast material takes about 1 hour to circulate to the brain cells at which time you will have your scans taken. You may be asked to perform some simple tasks including a questionnaire.

The SPECT camera with take a series of pictures around your head. It will be extremely important that you lie completely still during these pictures. The technologist will remind you about this as the exam is taking place.
Answers to Common Questions

How Long Will the Test Last?

All totaled the entire process will last about 1 ½ to 2 hours. The scan portion itself only lasts approximately 30 minutes.

Are there any side effects from the 99mTc-Ceretec injection?

No. You will not feel a thing at any time during the test. The injection is performed through an IV catheter that is placed in an arm vein.

I'm claustrophobic, will I be totally enclosed in the machine?

The camera will come close to your face as it rotates once around your head and may lightly brush against your shoulders. Otherwise, no part of the machinery will touch your body. Most patient's that are claustrophobic have no problem having the scan.

Do I Have to Stop Any of My Medications or are there any food or liquid restrictions prior to taking this test?

No.

Is the Radiopharmaceutical a Dye?

No. It is a radioactive agent that will localize in areas of the brain and will be imaged with a camera. It contains NO IODINE.

What Should I Do During the Examination?

Simply relax, and follow the technologist’s instructions. Your only participation will be to remain as still as possible during the exam and breath normally. It is very important that you are comfortable before the scan begins. Movement of the head while the pictures are being taken may require that the scan be repeated. The technologist will keep you informed about what is going on.

YOUR APPOINTMENT INFORMATION

DATE: ___________ TIME: ___________

DIRECTIONS:

599-9th Street St. N., Suite 211 SW Corner of 6th Ave. N & Hwy.41 (west side of Hwy 41{Tamiami Trail} in Capital Bank Bldg. - (3 story orange Bldg.)

Phone: 239-263-8001

****** A PREGNANCY TEST ******
IS REQUIRED PRIOR TO THIS TEST FOR ANY FEMALE OF CHILD BEARING Age UNLESS YOU HAVE HAD TUBAL LIGATION OR HYSTERECTOMY. FOR ANY OTHER REASONING, PLEASE CALL OUR TECHNOLOGISTS FOR ADDITIONAL INFORMATION.

IF REQUIRED, IT SHOULD BE PERFORMED THE DAY BEFORE YOUR APPOINTMENT WITH RESULTS IN OUR OFFICE THE DAY PRIOR TO YOUR APPOINTMENT.